

REMARKS

Claims 1, 6, and 7 remain in this application. Claims 3 and 4 have been cancelled. Claims 1, 6, and 7 have been amended.

McJunkin relates to the convenient mounting to a vehicle of a conventional anti-roll bar system by means of the leaf springs (12, 13).

McJunkin creates roll stiffness by means of a separate flexible spring bar system which operates completely separately from the leaf springs during vehicle roll and which is mounted to the leaf springs to save cost in the mounting points and brackets to the frame (Column 1, lines 57 and 58).

McJunkin is not mounted to the leaf spring rigidly but by means of elastomeric bushes (41, 44) (Column 1, lines 41 to 43).

As the mountings are via elastomeric bushes, they cannot pass any torque through the mountings, only direct loads. This is normal with conventional system mountings but McJunkin also backs this up in lines 53 to 55 of column 2, where McJunkin states that when performing its function (to resist roll) the bolts are free from bending and shear. This only leaves direct tension and compression, which means direct loadings.

Had McJunkin been mounted to the springs rigidly, the springs would not function as springs at all, only as solid rigid beams. The forces in the connection would be unsustainably high.

As McJunkin's springs deflect, the leg (22, 23) of the bar has to move axially within the elastomeric bushes. Any elastomer resistance to this movement will create a slight torque within the springs due to the offset of the bar from the neutral axis of the spring leaves. This slight torque will occur during all deflections of the springs, not just during roll. This creates the anti-wind up, tramp and extra stability claimed (Column 1, lines 45 to 48). This is a permanent stiffening of the springs which occurs all the time, to the detriment of the vehicle ride and not just during vehicle roll as is provided by the Reast suspension.

The reactions to the direct loads at the spring mounting brackets (34, 37) create torque down the central transverse section (33) of McJunkin (Column 1, line 48). During roll, the direct loads created need to be in opposite directions on each side. They will slightly affect the bending moments in the spring but as they have to be spread over virtually the whole of each spring cantilever's working section, they are completely different to the "encastre" or fixed end, direct moments as specified in the Reast claims.

In the Reast suspension, moments have to occur at or extremely close to the spring mounting pivots which are converted into solid or fixed mountings during roll only by applying a direct torque through a rigid mounting close to the spring mounting pivots.

In McJunkin, direct loads during roll would have negligible, if any practical, stiffening effect on the springs. This is because they have to span the whole working section of the spring cantilever. Therefore, McJunkin has to rely on the conventional separate springing system to provide anti-roll resistance and to perform as a vehicle anti-roll device. This is a completely different mechanism than that provided by the Reast suspension.

Respectfully submitted,

John Bolland Reast

Fildes & Outland, P.C.

Christopher J. Fildes, Attorney
Registration No. 32,132
20916 Mack Avenue, Suite 2
Grosse Pointe Woods, MI 48236
(313) 885-1500